East Face Vegetation Management Project

Economic Report

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for:
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Introduction

This report analyzes the economic effects associated with the East Face Vegetation Management Project (hereafter called **East Face Project**). The effects of the alternatives on the local economy are discussed in terms of investments to individual projects for contracted work in terms of jobs in woods, wages associated with jobs, and the total economic output to local economies.

The economic impact analysis is used to identify potential impacts to economic conditions such as employment and income.

Affected Environment

Affected Geographic Area

The East Face Project is located within Baker and Union Counties. The counties most likely affected by the East Face Project are the five county region of northeast Oregon including Baker, Grant, Umatilla, Union and Wallowa counties. Federal land ownership in these counties is significant. For the five county region, an estimated 48.8% of the land base is federal land and 42.9% is Forest Service ownerships. See table 1 below for ownership patterns for each individual county.

Table 1 – Land Ownership by County

County	Federal Land Ownership	Forest Service Land Ownership
Baker County	1,003,987 acres (50.8%)	641,128 acres (32.5%)
Union County	602,854 acres (46.3%)	591,909 acres (45.5%)
Grant County	1,754,673 acres (60.5%)	1,578,903 acres (54.5%)
Umatilla County	444,191 acres (21.5%)	404,729 acres (19.6%)
Wallowa County	1,198,467 acres (59.5%)	1,183,938 acres (58.8%)

*Estimates from Headwaters Economics, Economic Profile System (2013 basis)

Employment Trends

In 1998, timber represented 7.9% of total employment in the local five county region. In 2013, timber representation had been reduced to 3.94% of the total employment. See table 2 below for a summary of estimated timber jobs and representation of the total workforce estimated for each county.

Table 2 – 2013 Timber Job Totals by County

County	Timber Forestry, Logging and Support	Timber Manufacturing Facilities
Baker County	13 jobs (0.3%)	187 jobs (4.8%)
Union County	104 jobs (1.5%)	427 jobs (6.1%)
Grant County	46 jobs (3.3%)	66 jobs (4.8%)
Umatilla County	20 jobs (0.1%)	452 jobs (2.1%)
Wallowa County	54 jobs (3.5%)	12 jobs (0.8%)

*Estimates from Headwaters Economics, Economic Profile System (2013 basis)

Economic Effects

Introduction

The boundary of the direct, indirect and cumulative effects analysis area is the five county area surrounding the East Face project area boundary (Baker, Grant, Umatilla, Union, Wallowa counties). This five county area provides a potential workforce to implement the project as well as existing infrastructure and delivery points involved with wood product manufacturing.

Assumptions

The following describes the assumptions utilized for analyzing the effects of implementing the alternatives based upon estimated contract investments needed to implement planned activities of the project.

Numerous contracts will be offered to accomplish the planned ground activities identified in each alternative. It is anticipated that service contract types will be extensively utilized since the value of products will be insufficient to offset the cost of the work in all alternatives. Contracts may include a variety of work such as timber harvest activities (including costs associated with stump to truck, haul, road maintenance, reconstruction and temporary road costs), forest road improvements (fish passage culvert and bridge installation), and fuels reduction treatments. The potential investments have been incorporated into an economic model that provides a relative comparison between alternatives in terms of potential economic effects to local communities. This analysis focuses on the potential investments to implement the ground activities associated with the project and compares modeled effects on employment, wages and economic impacts within communities.

Table 3 displays costing assumptions utilized to calculate potential investments. Investment contract costs were estimated based on removal volumes for harvest type work, treatment acres of fuels/vegetation management work and treatment miles for road reconstruction work.

Table 3 – Contract Investment Assumptions and Alternative Comparison

Type of Work	Investment Value	Acres by Alternative				
		Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Ground Based Logging	$150/MBF	0	17,246 MBF	10,874 MBF	6,579 MBF	19,011 MBF
Skyline Logging	$300/MBF	0	3,584 MBF	1,371 MBF	1,337 MBF	4,786 MBF
Helicopter Logging	$600/MBF	0	1,070 MBF	255 MBF	1,084 MBF	1,369 MBF
Road Reconstruction	$25,000/mile	0	53 miles	39.3 mines	27.8 miles	61.6 miles
Culvert Replacement Fish Passage	$40,000	NO	YES	YES	YES	YES
Bridge Replacement	$250,000	NO	YES	YES	YES	YES
PCT –	$200/ac	0	3642 ac	3488 ac	6708 ac	1472 ac

Type of Work	Investment Value	Acres by Alternative				
		Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Precommercial thin						
Fuel Reduction Mech (GP/MP)	$400/ac	0	12,449 ac	8,587 ac	10,268 ac	9,828 ac
Fuels Reduction Biomass Removal	$1000/ac	0	0	0	0	2,560 ac
Fuel Reduction Hand work	$350/ac	0	7,286 ac	7,748 ac	9283 ac	8722 ac
Planting	$400/ac	0	257 ac	0	80 ac	257 ac

GP/MP – Grapple pile/Machine pile

Direct and Indirect Effects on Economics

ALTERNATIVE 1 – No Action

Because this alternative would not implement any of the fuel reduction activities proposed in the action alternatives there would be no investment revenue received from logging, fuels reduction, and road work within the counties surrounding the East Face project area.

ACTION ALTERNATIVES 2, 3, 4, 5

The following table summarizes the total estimated investment for each type of work and the total for each action alternative. In the table below:

Harvest related work includes: costs associated with stump to truck (felling, yarding, loading), log haul, road maintenance, road reconstruction, and construction/obliteration of temporary road costs.

Road Culvert/Bridge work includes: purchase of materials and installation of culvert and bridge including manpower and equipment.

Fuels Reduction/Vegetation Management work includes: precommercial thinning, slashbusting, grapple piling, whipfelling, planting, fuel reduction work by hand, and handpiling. Does not include prescribed burning, jackpot burning, and pile burning (these will be accomplished by the Forest Service).

Table 4 – Investments by Alternative

Alternatives	Type of Work	Expected Investment for Each Type	Total Investment
2	Harvest Related Work Road Culvert/Bridge Fuels Reduction/Vegetation Management	$7,891,601 $290,000 $10,668,450	$18,850,051
3	Harvest Related Work Road Culvert/Bridge Fuels Reduction/Vegetation Management	$4,651,141 $290,000 $8,974,900	$13,916,041
4	Harvest Related Work Road Culvert/Bridge Fuels Reduction/Vegetation Management	$3,582,574 $290,000 11,101,925	$14,974,499
5	Harvest Related Work Road Culvert/Bridge Fuels Reduction/Vegetation Management	$9,186,093 $290,000 $12,715,650	$22,191,743

Within Oregon, it is estimated that contract investments will generate between 15.7 – 23.8 jobs depending upon the work (labor intensive versus equipment intensive), as well as additional indirect jobs for each $1 million invested. (Economic and Employment Impacts of Forest and Watershed Restoration in Oregon, University of Oregon Ecosystem Workforce Program – Working Paper Number 24, Spring 2010). Direct effect employment includes those jobs created or maintained in businesses contracted to perform the work on the ground. Indirect effect employment includes those jobs associated with the demand for materials, supplies, equipment and other services needed to support the contract work.

Table 5 – Jobs by Alternative (based upon dollars invested)

Alternative	Direct Jobs	Indirect Jobs	Total Jobs
2	143.8	94.5	238.3
3	118.4	69.8	188.1
4	136.8	75.1	211.9
5	164.6	111.2	275.8

Wages would be earned as a result of the jobs produced or maintained from the contract work. Total wages earned on a project vary dependent upon the proportion hand work versus mechanical work on a project, with hand labor wages typically being lower than equipment intensive work. Table 6 displays estimated wages associated with the jobs produced.

Table 6 – Wages Earned by Alternative

Alternative	Direct Wages	Indirect Wages	Total Wages
2	$4,955,697	$3,289,886	$8,245,583
3	$3,869,618	$2,428,755	$6,298,373
4	$4,326,662	$2,613,485	$6,940,147
5	$5,751,882	$3,873,110	$9,624,992

Total economic activity is the value of all of the goods and services produced as a result of the project work (Direct Output) as well as through the purchase of goods and services needed to support project implementation and the value of goods and services supported by household spending of income earned during project implementation (Indirect/Induced Output). Table 7 displays the economic outputs estimated for the investments for each of the action alternatives.

Table 7 – Total Economic Output for Investments

Alternative	Direct Outputs	Indirect Outputs	Total Outputs
2	$17,312,495	$10,064,356	$27,376,851
3	$12,780,941	$7,430,001	$20,210,942
4	$10,462,712	$6,082,325	$16,545,037
5	$20,381,613	$11,848,542	$32,230,156

Summary

While Alternative 5 has the potential for the largest economic output for investments followed by Alternatives 2, 3, and 4 in that order (tables 5-7); one must consider the likelihood that adequate funds will be available to fully implement the project. Diminishing federal budgets have the potential to affect the Forests' ability to make these investments, particularly related to non-commercial fuel reduction activities. Each alternative is projected to produce a deficit sale when considering harvest related work because logging costs exceed timber values. Logging systems, road work, slash treatment and utilization levels of the harvest are the primary factors contributing to this situation. None of the alternatives will provide adequate timber value to fully implement the work; therefore, service contracts will be necessary.

Funding for fuels related service work such as those proposed in the East Face project is typically associated with hazardous fuel treatment funds. The past 10 year average annual hazardous fuel funding allocation to the Wallowa-Whitman is approximately $2.4 million. These funds support not only the federal personnel to do the planning, contract preparation and administration but also pay for the completion of the contract work. In the East Fact project, fuel reduction funding needs (table 4) for completion of the contract work alone ranges from approximately $9 million to $12.7 million. Given current funding levels, it would take approximately 10-14 years to complete the non-commercial fuels reduction work in the East Face area with no funding available for any other fuel reduction work on the remainder of the forest. Additional funding support will most likely be needed to complete all of the fuels reduction work for this project. Alternative 3 would have the least need, followed by Alternatives 4, 2 and 5 in this order.

Cumulative Effects on Economics

ALTERNATIVE 1 – No Action

The no action alternative would not contribute to the economies of the counties surrounding this project area; therefore, it has the potential to further impact the current struggles of the timber industry in northeast Oregon.

ACTION ALTERNATIVES 2, 3, 4, 5

The cumulative effect of Alternatives 2, 3, 4, and 5 are similar, they would all provide the counties surrounding the project area with receipts which otherwise would be dollars out of the taxpayers pocket. They would provide jobs as described under the direct and indirect effects above. The income generated by this project contributes to family wage earners and local industries which in turn support other local businesses, hospitals, and services contributing to the overall economic vitality of the Counties. More of this happens under Alternatives 5 and 2 than under Alternatives 4 and 3. In addition, the alternatives and the effects will be similar when considering utilization of material at manufacturing facilities. The products produced from this project under all of the action alternatives would not support the local businesses and mills alone; however, when added to the wood products being removed from other private, adjacent State, and corporate lands, as well as other national forest timber sales, it contributes to the overall viability and sustainability of local mills and businesses. The acres treated would provide seasonal work/benefits over a period of 8-10 years.